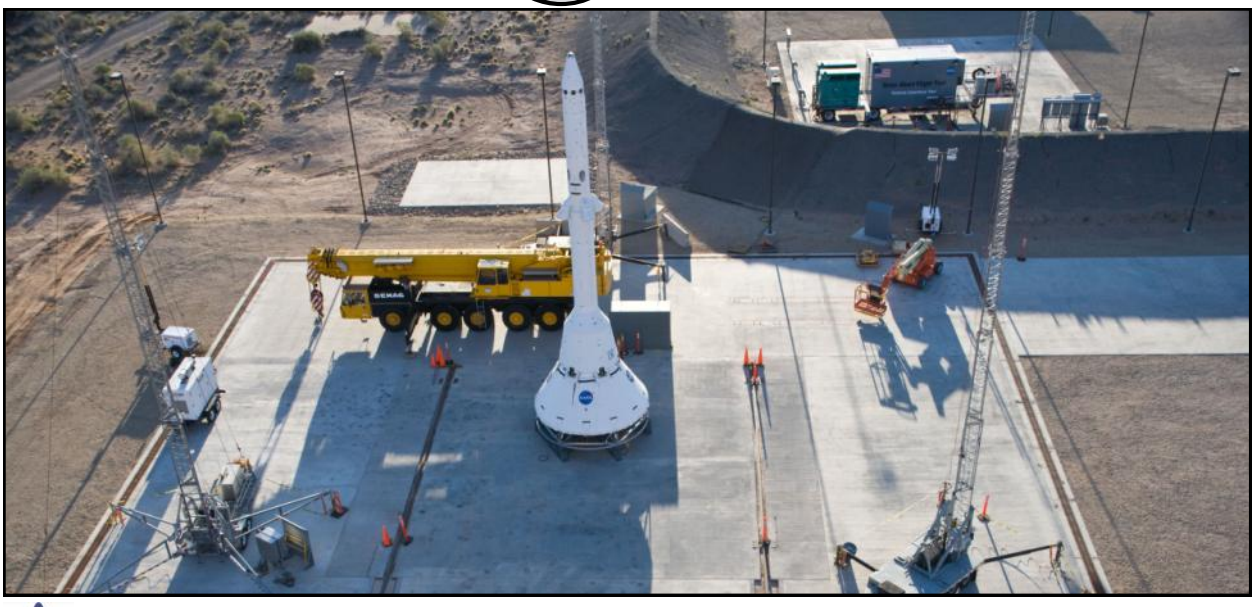
ORION
CREW EXPLORATION VEHICLE

WEEKLY ACCOMPLISHMENTS

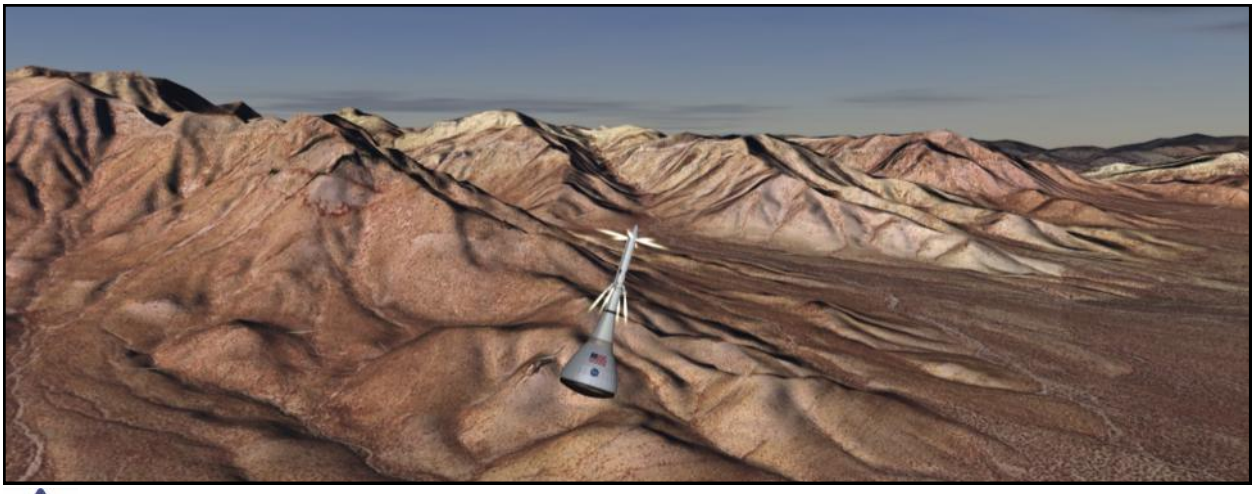
the countdown is on for Pad Abort 1

04.30.10



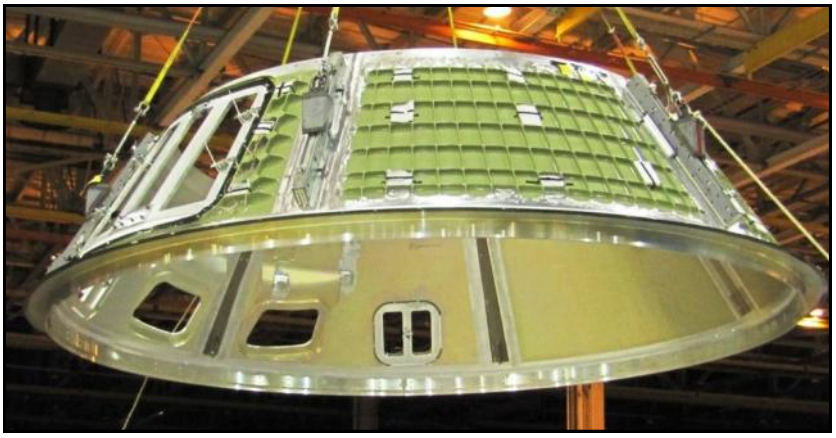
With less than one week to launch, the Pad Abort 1 team continued preparations for the upcoming test on May 6th at White Sands Missile Range (WSMR) in New Mexico. The team continues to meet all major milestone requirements as the final closeout of the launch vehicle nears.

NASA and engineering support contractors completed a demonstration test of the main parachute test equipment (shown above) for the Orion crew exploration vehicle at the U.S Army's Yuma Proving Grounds in Yuma, Ariz. The demonstration is part of a series of tests to support the design and development of the Orion parachute recovery system, which is derived from the system NASA used to recover the Apollo spacecraft.



The Orion System Management (SM) team provided a demo (shown above) to the Standing Review Board (SRB) in Kedalion that featured several Orion Flight Test Article flight scenarios. The Kedalion test bed includes a Honeywell VMC Test Bench, Osiris/Antares sims, TTGbE bus, sensor stimulators (GPS simulator, starfield generator, rate table), and ground control equipment (EGSE) operating in a closed-loop enabling significant engineering analysis and concept validation. The demo content was partially enabled by close collaboration of the NASA SM team with Lockheed Martin, using an Integrated Synch Point (ISP) strategy for incremental prototype and/or flight software development.

Welding progress continued on the Ground Test Article (GTA) at the Michoud Assembly Facility (MAF) in New Orleans, Louisiana. Recently the team completed the cone/mid ring weld (shown right) and was labeled “100% clean” through the Non Destructive Evaluation (NDE). Next, the team will work on trimming the upper surface of the cone while work continues on the backbone assembly.



The Joint EVA NBL Orion Mockup (JENOM) was delivered to the Light Manufacturing Facility at the Sonny Carter Training Facility in Houston, TX. The JENOM will spend the next couple of months being outfitted before it is moved into the Neutral Buoyancy Lab (NBL) where it will be used for EVA evaluations in a weightless environment.